

BABAB

A magazine on drylands development and sustainable agriculture / Issue 61, March 2011

A young man is shown from the side, bent over and working in a field. He is wearing a grey and red long-sleeved shirt and dark trousers. He is using a wooden-handled hoe to dig in the reddish-brown soil. The field is filled with small green plants, likely corn seedlings. In the background, there are trees and a clear blue sky with a few clouds. The overall scene depicts agricultural work in a dryland environment.

YOUTH AND FARMING

Editorial

Dear Reader,

Welcome to the first issue of the *Baobab* magazine this year. We begin the year with an intricate theme on youth and farming. It is often said that the youth are tomorrow's future. That may hold true but if the youth do not take up or are not encouraged to become farmers this region may be at risk.

Food security continues to be a top agenda in many places. With the continuous ravaging of our environment by climate change, then that future needs to be today. Action needs to be taken to involve the youth in farming. They need to get involved in efforts towards food security for all, better management of land as well as have innovative ways of farming.

The period August 12, 2010 to August 11, 2011 was declared the International Year of Youth by the United Nations General Assembly in 2010. Operating under the theme 'Dialogue and Mutual Understanding', it is clear that attention must be drawn to pull in the participation of the youth in local, national and global development. In Africa out of the 1.2 billion people, 70 percent are under the age of 25. On the other hand, experts estimate that in 50 years, the world's population will stand at over 9 billion people and to feed it, agricultural productivity needs to increase by 50 to 70 percent.

The laxity of young people taking up farming may be due to, but not limited, to lack of farming incentives, inadequate access to productive assets such as land and capital, inadequate infrastructure, limited well functioning markets, high population pressure on land and inadequate access to appropriate technologies by farmers.

In this issue, we look at ways in which farming can become 'attractive' for the youth.

Other themes for this year include: *Trees and Farming*, *Regional Food Systems* and *Land Issues* for the June, September and December issues of *Baobab*.

We welcome your feedback and comments as we strive to make *Baobab* even more informative and relevant this year.

James Nguo
Regional Director



Contents

4

THEME OVERVIEW: Youth and farming



8

PROJECT FOCUS: The Use of ICTs in African Agriculture



13

OPEN COLUMN: IFAD Sets Youth as Top Priority



20

ON THE SUBJECT OF: School Programs Drawing Pupils to Farming



Other Pages...

Stork Story Pg 18

TECHNICAL NOTE: Rearing Rabbits Pg 26

GUEST COLUMN: Youth Groups Spur Farming Pg 28

OPEN COLUMN: Promoting Value Addition Pg 30

BAOBAB

ISSN: 0966-9035

Baobab is published four times a year to create a forum for ALIN members to network, share their experiences and learn from experiences of other people working in similar areas.

Editorial Board

James Ngao
Anthony Mugo
Noah Lusaka
Esther Lung'ahi
Susan Mwangi – Chief Editor

Illustrations

Shadrack Melly

Layout and Design

Lisa Waweru (Noel Creative Media)

Important Notices

Copyright

Articles, pictures and illustrations from Baobab may be adapted for use in materials that are development oriented, provided the materials are distributed free of charge and ALIN and the author(s) are credited. Copies of the samples should be sent to ALIN.

Disclaimer

Opinions and views expressed in the letters and articles do not necessarily reflect the views of the editors or ALIN. Technical information supplied should be cross-checked as thoroughly as possible as ALIN cannot accept responsibility should any problems occur.

Regional Editions

1. Farming Matters global edition by ileia
2. LEISA REVISTA de Agroecologia, Latin America edition by Asociacion ETC andes.
3. LEISA India, by AME foundation
4. SALAM majalah pertanian Berkelanjutan by VECO Indonesia
5. AGRIDAPE, French West African edition by IED Afrique
6. Agriculture, experiences em Agroecologia, the Brazilian edition by AS-PTA
7. Chinese edition by CBIK

Talk to us

The Baobab magazine

Arid Lands Information Network, ALIN
P. O. Box 10098, 00100 GPO, Nairobi, Kenya
AAYMCA Building, Ground floor, Along State House Crescent,
Off State House Avenue, Nairobi
Tel. +254 20 2731557 • Telefax. +254 20 2737813
Cell: +254 722 561006
E-mail: baobab@alin.net • Or visit us at www.alin.net

About ALIN

Arid Lands Information Network (ALIN) is an NGO that facilitates information and knowledge exchange to and between extension workers or infomediaries and arid lands communities in the East Africa region. The information exchange activities focus on small-scale sustainable agriculture, climate change adaptation, natural resources management and other livelihood issues.





YOUTH AND FARMING

Agriculture is the backbone of East African countries' economies. It plays an important role in socioeconomic development by ensuring food security, providing raw materials for local industries, generating foreign exchange as well as providing employment and income for most of the population, majority of which is rural-based.

By Paul Sandys and Baobab Team

Like the rest of the world, East Africa is changing rapidly with changes impacting many sectors including agriculture. With these changes, new technologies, products, markets and business possibilities are emerging. It is especially critical for young people to keep up with these trends.

The agriculture sector contributes about 30 - 40 percent of the regional Gross Domestic Product (GDP) and engages more than 60 percent of the workforce. It is however a matter of concern that young people have generally been reluctant to meaningfully engage in it as a source of their livelihoods preferring to pursue ever-elusive “white collar” jobs in urban areas.

In attempts to change this state of affairs, the East African governments have started to introduce policies to help the youth engage in agricultural activities.

The Policy Environment

Tanzania's National Youth Development Policy that was developed in 1996 has strategies of training youth in modern agriculture and livestock through

the use of appropriate technology so as to increase their productivity. Under the programme, the youth are engaged in competitions on modern agriculture and animal husbandry in collaboration with the communities.

In Uganda, The Plan for Modernization of Agriculture (PMA) has managed to reach out to the youth in most parts of the country. Operated under the National Agricultural Advisory Services (NAADS), farmers get assistance through registered farmers' groups where they are given planting materials, livestock breeds and other inputs but pay back 70 percent of the value of the technology. Income from the repayment is used as a revolving fund from which others continue to benefit. This scheme is to the advantage of the youth who usually lack capital to start up profitable agricultural projects.

In Kenya, agricultural policy is guided by the Agricultural Sector Development Strategy (ASDS) 2010 – 2020. In it, the government commits to involve young people by making agriculture more attractive. While addressing the 34th International Fund for Agricultural Development (IFAD) Governing Council meeting on February 19, 2011, Kenya's Minister for Agriculture Dr. Sally Kosgey underscored the need to involve youth in agriculture. She

Joyce Njoki harvesting tree tomatoes fruits in Ng'arua Division, Laikipia District.



observed: "This year's theme 'Feeding future generations – young rural people today, prosperous farmers tomorrow' is very timely. This is more so in Africa because a larger part of population is composed of young people. In Kenya for example, over 65 percent of the national population is under 35 years of age."

She pointed out that farming tends to remain a practice of older people than the youth while unemployment soars and that it is imperative that for the youth to be more involved in farming, agriculture has to be made attractive. "We believe that to attract the youth, agriculture must be transformed to move from purely subsistence to commercial farming, where farmers undertake agriculture as business that earns them enough income to prosper."

East African governments have begun to go out of their way to involve state corporations and the private sector in facilitating young people to engage in agriculture as a business. In Kenya for example, the Agriculture Finance Corporation (AFC) has a micro-credit facility known as *Stawisha* (Kiswahili for sustain) aimed at young people. It gives loans in the range of Kshs. 5,000 – 1 million (US\$62 – 12,500) and allows flexible repayment.

The same corporation has also started *Vuna* (Kiswahili for harvest) account that is designed for groups and individuals in agricultural business, hence an additional opportunity for the youth. This account has already been rolled out in five of the 38 branches countrywide and plans are complete to roll it out to all the remaining 14 branches.

In Tanzania the United States Department of Agriculture (USDA) in partnership with the government of Tanzania makes loans to rural youth to establish and operate agro-based income-generating projects of modest size. Guaranteed loans are made through private lenders with a guarantee of up to 95 percent of the loss of principal and interest. Direct and guaranteed operating loans can be used to purchase livestock, equipment, feed, seed, and other material essential to a farm or ranch operation.

Making Agriculture Attractive to Youth

A key impediment to the involvement of youth in agriculture has been the lack deliberate national efforts to make agriculture attractive to young people. An example from Uganda illustrates this point. An opinion piece carried by *The Monitor* newspaper of September 29, 2010 read in part as

Intercropped grafted mangoes and pineapples. Charles Mureithi's farm. Ngarua, Laikipia District.



Photos: Noah Lusaka



...These cases portray agricultural-related activities as deserving for wrongdoers hence limiting the youth enthusiasm to pursue livelihoods in agriculture.”

follows: “Uganda’s agriculture is unattractive to the young partly because it has been used in schools in the administration of punishments to errant and in-disciplined children especially in the countryside. Those under detention in prisons have many times been hired by the village bourgeoisies to work on their farms with a ‘Katikiro’ (a term for the head of prisoners) cruelly whipping the lazy ones or those who are weak to match the pace of those who are energetic working ahead of them.

“These cases portray agricultural-related activities as deserving for wrongdoers hence limiting the youth enthusiasm to pursue livelihoods in agriculture. Consequently, possibilities for agriculture-led growth are jeopardised. This leaves agriculture in the hands of the ageing rural population leading to low productivity hence a threat to food security.”

Agriculture clubs in Kenyan and Tanzania schools are good examples of how to make agriculture interesting. Activities in those clubs involve pupils being allocated small plots within the school compounds and growing a variety of food crops. The crops are subsequently purchased by the schools. They encourage more hands-on learning on agriculture and food production making education more exciting and practical. The business component helps the students to easily form a linkage between agricultural production and generation of income.

Young agriculture entrepreneurs speak out

It would appear that the message to young people to get involved in agriculture is beginning to bear fruit in East Africa. “Availability of various funds such as the youth enterprise development fund is starting

to make agriculture more appealing,” said Ephraim Muchemi, a 23-year old man who has started poultry farming in Banana trading centre in Kenya’s Kiambu County. He has more than 100 chickens and a dream of opening retail outlets for chicken and eggs around Nairobi’s environs.

Explaining why she started a fish farm at Mwihoko area near Kahawa Sukari estate in the outskirts of Nairobi, Mercy Njeri, a 21-year old woman said: “I needed something that would require little capital and opted for fish farming. I was pleasantly surprised when on inquiring from the government fisheries officials about how to go about fish farming, I was readily offered free advice.” She started her fish farming venture in 2010 with savings of Kshs. 80,000 (US\$ 1,000) and has just made her first harvest. “This is good. I encourage more young people to take up this opportunity to employ themselves instead of abandoning their homes to search for white collar jobs in urban centres,” she said.

Wasted energy

Commenting on historical failure by policy makers to lay strategies for attracting youth towards agriculture, the following excerpt from a commentary by a former Kenyan minister who is also a nutritionist, Prof. Ruth Oniang'o, captures the anomaly appropriately: “There are so many youths who, as a result of fast population growth and formal employment sectors’ lack of absorptive capacity, are virtually lost. This is wasted or idle energy which needs to be tapped and harnessed for useful engagement. Even in areas where there is plenty of land for tilling, our youth are loitering around trying to contact relatives in urban centres for jobs outside of the immediate community. The level of poverty and sense of hopelessness are beyond any caring human being’s imagination – we must make agriculture lucrative and attractive.” It is hard to disagree.

Paul Sandys is a freelance writer on agriculture and livestock. He is based in Nairobi, Kenya. E-mail: dsjabris@gmail.com

References

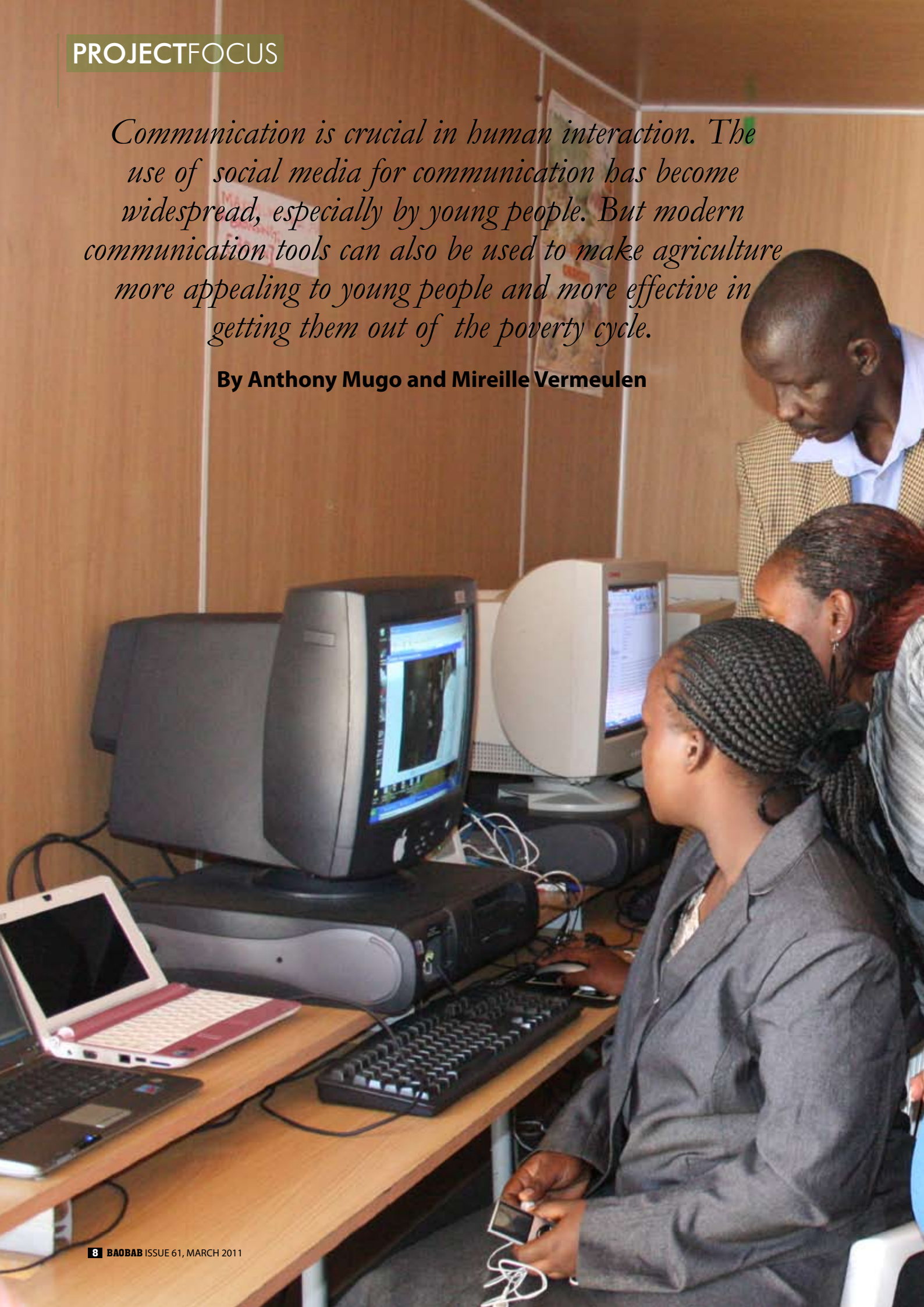
<http://www.ifad.org/events/gc/34/speech/kenya.htm> (February 25, 2011)

<http://allafrica.com/stories/201009290112.html> (February 25, 2011)

Prof. Ruth Oniang'o in *Enhancing People's Nutritional Status Through Revitalisation of Agriculture and Related Activities*, African Journal of Food and Nutritional Sciences: Vol. 1 No. 1, August 2001.

Communication is crucial in human interaction. The use of social media for communication has become widespread, especially by young people. But modern communication tools can also be used to make agriculture more appealing to young people and more effective in getting them out of the poverty cycle.

By Anthony Mugo and Mireille Vermeulen



THE USE OF ICTS IN AFRICAN AGRICULTURE

Though neglected for a long time, Information and Communication Technologies (ICTs) have become recognised as an important tool to enhance development, especially in Africa. In choosing the most appropriate and effective tool or medium for communication, Francois Laureys of the International Institute of Communication for Development (IICD) explains that it depends on the type of information to be sent out: "In Africa, radio is still the cheapest and most efficient tool for expressing messages about a broad range of issues, like farming, democracy or lifestyle. By building in feedback-loops via internet or radio, it can even offer two-sided communication."

Using ICTs in farming, for example for spreading information about practices and market prices for agricultural products, requires other tools like mobile phones or computers. In West Africa, the application of mobile phones into farming is limited: most farmers use it for social communication. Part of the problem is that there are still practical problems in the use of ICTs on a large scale: vast areas in Africa are still not connected. Besides, the cost of communication is very high: an average person in Africa pays relatively ten times as much for communication as a European. Besides, practical ICT applications for farming are still limited. Illiteracy remains a major problem, which limits the full use of digital ICTs, especially for the elder generation. But if visual multimedia such as video and photography are used, the potential for training and learning about agriculture is enormous, according to Laureys.



John Njue, Kyuso Maarifa Field Officer assists a Nun on computer use.

Container Knowledge

Arid Lands Information Network (ALIN) has been promoting *Maarifa* centres (Kiswahili for knowledge) for the last five years. With access to internet and providing different services, recycled sea containers in some cases and rooms provided by host organisations serve as information hubs in remote areas. They aid to reach out to farmers and pastoralists with information on new agriculture and animal husbandry technologies with a view to speeding up their adoption and therefore the improvement of the livelihoods of poor communities.

A typical *Maarifa* centre features publications, CD ROMs, videos, DVDs and five or more computers with broadband internet connectivity. Each *Maarifa* centre is managed by a field officer, a young woman or man with interest and training in information management or agriculture. A young volunteer from the community, known as a Community Knowledge Facilitator (CKF) supports the field officer in running the centre. Between them, they ensure that everybody who visits the centre is well served irrespective of their level of literacy. Although open to all community members, the *Maarifa* centres offer the youth in particular opportunities to learn and use of modern ICTs to search for agricultural information from the internet.

The establishment of a *Maarifa* centre starts with an 'Open Day' that brings together the neighbouring communities, including representatives from government departments and civic organisations, community groups, schools, and the general public. An advisory committee formed by the

local community co-ordinates outreach activities around each centre. Each has a community focal group attached to it. Among the members of the focal group are *infomediaries* with some expertise in extension. They are instrumental in supporting field officers to repackage information for farmers. Currently there are eleven *Maarifa* centres; eight in Kenya, one in Uganda and two in Tanzania. Three new centres have been set up in northern Uganda and another one in Kenya's town of Elwak.

Information Experts

John Njue is the field officer at the *Maarifa* Centre at Kyuso, a dry part of eastern Kenya: "Our *Maarifa* Centre acts as a referral point for people interested in developmental content. The district does not have any community library and therefore students of agribusiness, crop production and horticulture come to the centre for reference." One of his tasks, after learning users' information needs, "is to repackage the information available. In November 2010, for example, information on indigenous poultry keeping was the most sought after. Weather anomalies related to *La Niña* were predicted. Many young people wanted to raise poultry as an alternative farming enterprise". During the rainy season, many farmers flock the centre to access information on non-chemical pest management. Recognising time constraints they face, women farmers are allowed to borrow iPods from which they watch best practices in sustainable agriculture and discuss them during their free time.

John himself is not directly involved in any agricultural enterprise though. "I admire farming but not the kind our forefathers practised. The reason why I don't

Activities of a Maarifa centre.



farm is that my parents and neighbours would not listen to my opinion of practicing modern farming techniques and farming as a business." According to him, most young people fail to engage in agriculture because of lack of support from people around them. He feels that it would be beneficial to young people if the government employs young agricultural extension officers. This, he feels, would make it easier to communicate to young farmers and support them to get into agriculture as a business as opposed to agriculture for subsistence. He also observes that many extension officers do not use modern technologies in their training, noting that this could be a deterrent to youth participation in agriculture.

Samuel Nzioka is the newly appointed field officer at *Maarifa* Centre in Nguruman, a very remote part of Kenya's Rift Valley Province. He has a BSc degree in agriculture and is a strong believer that ICTs can help promote agricultural production: "ICTs can be used to document what the farmers are doing in one region and to facilitate the sharing of that information through CD ROMs, short videos and pictures." He is also positive about *Sokopepe*, an application to "to link the farmers and agricultural commodities through an online mobile phone and an internet based marketing portal, piloted by ALIN". At Nguruman, a youth group was trained on the use of ICTs and they developed their own blog through which they're able to share what they do.

ICTs for Organisation

According to Samuel, agriculture could be made far more appealing to young people: by giving the youth grants to help them start up farming, by

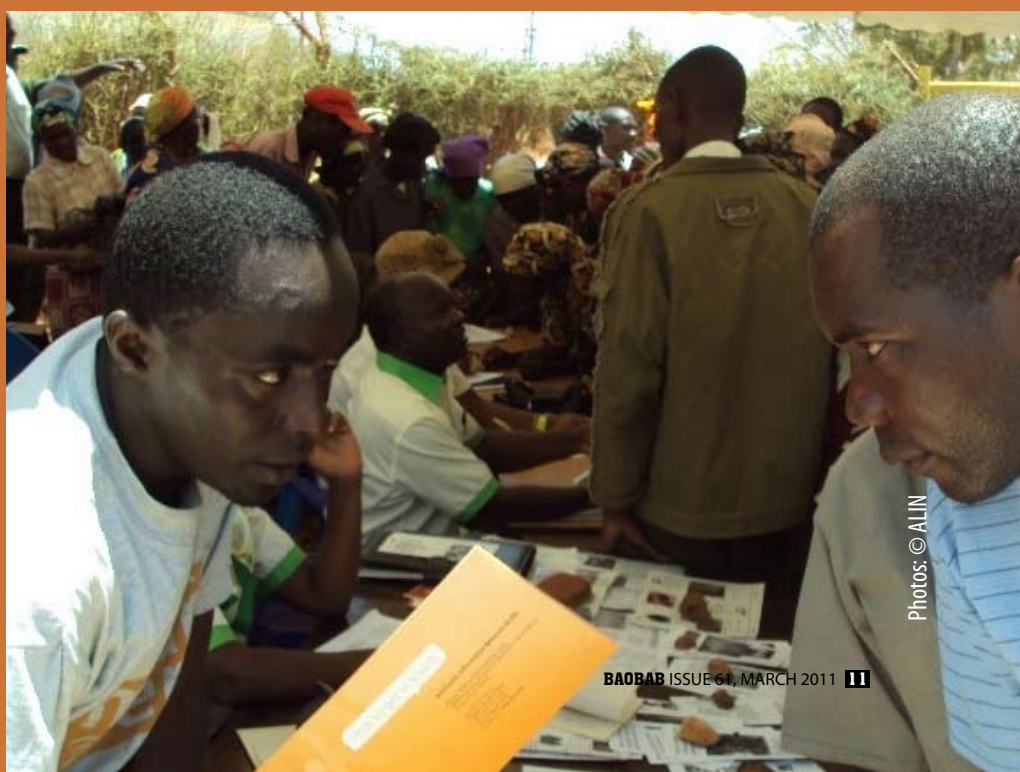
linking them with markets for agricultural produce, by setting up processing plants at the grassroots level for value-addition and employment, by training them on best farming practices to realize higher yields, and by organizing exchange-visits to learn from others. ICTs can be useful in every case.

This is what Laureys has seen in Mali, where IICD supported a women's association for shea butter production and marketing, with the provision of ICTs. Three computers, some solar panels, two photo-cameras and one video-camera permitted the women to present their product on a website. The use of computers and management and marketing tools raised the production and improved sales and revenues. But the women also managed to strengthen their organisation by better accountancy and reporting to the assembly. But Laureys also warns for too much optimism: "Having a website and being provided with market information is not enough to help the individual farmer getting out of the poverty trap. A certain level of organisation is needed." That's why it works with farmers' associations and interest groups. The shea butter womens' organisation enhanced rural development in Mali and the *Maarifa* centres play an important role in opening up remote areas in Kenya, Tanzania and Uganda. Information and communication empowers farmers. More than any other age group, young people can contribute to this.

About the Writers

Anthony Mugo is the Programmes Director at ALIN and Mireille Vermeulen is an editor with ileia.

E-mails: amugo@alin.net and M.Vermeulen@ileia.org



Photos: © ALIN

THE ONLY WAY
TO GUARANTEE
A BETTER FUTURE
IS TO CREATE IT.

Building a better world is a project of urgent importance. At Rolex, we're looking for five people capable of meeting the challenge. Do you have an original, forward-looking idea with the potential to impact on society and the drive to see it through? Then this is your opportunity to enter the Rolex Awards for Enterprise for 2012. A distinguished panel of international experts will select the five most outstanding candidates in the areas of science and health, cultural heritage, applied technology, exploration and discovery, and the environment. The winners will each receive a Rolex chronometer and US\$100,000 to advance their project. The deadline for pre-applications is 31 May 2011. For more details, visit www.rolexawards.com and help lay the foundations of a better world for all.



ROLEX AWARDS
for ENTERPRISE



ROLEXAWARDS.COM

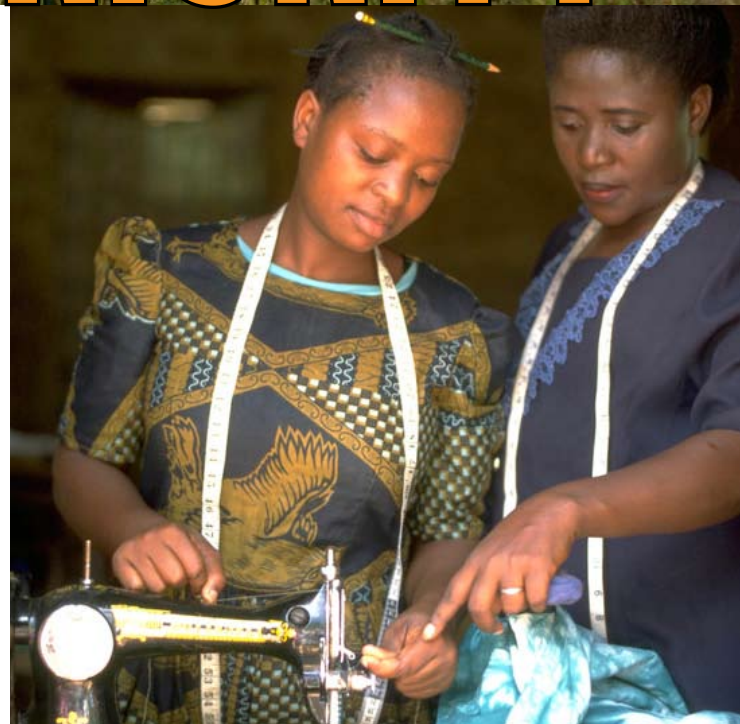


ROLEX

IFAD SETS YOUTH AS TOP PRIORITY

As the last century came to an end, the United Nations singled out youth as a target group in their Millennium Development Goals, with a view to developing and implementing strategies for decent and productive work for the youth. Ten years later, many international organizations have started focusing more on youth and development; the United Nation (UN) reiterated its agenda by proclaiming an International Year of Youth starting on 12 August 2010.

By Dominique Magada



Kenya: Priscilla Charo has set up a tailoring school as an income-generating activity, thanks to a loan from the Kenyan Women Finance Trust. ©IFAD/Giacomo Pirozzi

In Sub-Saharan Africa (SSA), young people aged between 15 and 24 represent as much as 36 percent of the entire labour force. Majority of them, at 70 percent, live in rural areas. Growth of the youth sector is expected to continue to be strong with an estimated increase of 26 percent in SSA alone (the fastest of all regions), to reach a global peak of 1.5 billion in 2035 from current levels of 1.3 billion, according to UN figures.

In that context, the International Fund for Agricultural Development (IFAD), Rome, which focuses mainly on poor people living in rural areas, has set as a priority to support young people and has put in place programmes which specifically respond to their particular needs. "We should remember that these young women and men, with their hopes and dreams, hold our planet's future in their hands. We must not fail them," said IFAD President Kanayo F. Nwanze. "With our support and our commitment, young people living in poverty in rural areas can make the change from being some of the most vulnerable people in today's world, to being active, productive and influential members of society. Today, they need our support. Tomorrow, we will need their contribution, their creativity, their commitment and their leadership."

Unemployment is a major problem for urban youth. But for young women and men in rural areas, underemployment and outright exploitation are often harsh facts of life. Today, some 300 million young people worldwide work, but earn less than US\$2 a day. In rural areas, they are often employed in the informal sector and also in unpaid family work, especially in agriculture. "In order to make a real difference to their lives, governments and development agencies must invest in young people themselves. Three key areas of investment are education, empowerment and access to finance," said Nwanze.

Education is an utmost priority, as in many countries, as much as one young person in four is illiterate,

most of them being young women. The proportion of young people with basic education deficits is greater in rural areas than in urban ones, because many rural children are taken out of school early to be put to work on plantations and family farms. It is estimated that some 60 percent of child labourers work in agriculture. By helping rural families send their children to school until the end of the curriculum, and support the improvement of school infrastructures, IFAD's projects and programmes can work at raising literacy levels particularly in remote rural areas.

Gender is another important issue when dealing with youth as young women have different needs from young men. "Rural development programmes that target young people need to take into account the different gender needs. Expanding girls education is the most obvious lever to change the situation of young women," said Maria Hartl, a youth and gender specialist at IFAD. A number of IFAD programmes are putting in place skills development or income generating activities for girls and young women to help them break up a circle of isolation and chores, and get them out of the house to meet other girls. "Such programmes help them to socialize, to increase their education and skills, including knowledge about health, nutrition and finance," she added. For boys and young men however, programmes can get them off the street and help put them to stand on their own feet, by learning new skills or finding employment.

However, for both men and women, access to productive assets is a key factor to help them get out of the poverty circle. "Helping them gain access to investment and financial services means empowering them to start and expand businesses. It means giving them the confidence to take an active part in community life. And, most of all, it enables them to contribute their youthful energy and creativity to their countries and their continents," said Nwanze. Through a variety of schemes, many IFAD projects are supporting micro-finance organizations to expand to remote rural areas and offer services to small farmers, currently unable to access banking services.

Helping young people build a future through farmers' organisations

Farmer organizations are also a key channel for young rural people to develop activities, get access to services and natural resources, and make their needs and concerns heard in decision-making processes. The Farmers' Forum, which was created in 2005 by IFAD, the International Federation of Agricultural Producers (IFAP), La Via Campesina and the Network of Peasant and Agricultural Producers' Organizations of West Africa (ROPFA), was

“

...governments and development agencies must invest in young people themselves.”



Tanzania: Children from Kwamtorro Primary School play football. In the background are the school's latrines constructed with the help of an IFAD project. ©IFAD/Christine Nesbitt



Kenya: A child of a farming family at the Kisumu farm in Western Kenya carries her little brother on her back. ©IFAD/Sahar Nimeh

designed as a process of consultation and dialogue between Farmers' Organizations (FOs), IFAD and governments focused on rural development and poverty reduction.

A global meeting of the Farmers' Forum, held in February 2010 at IFAD Headquarters in Rome, recommended that IFAD mainstreams youth in all its policies and programmes, with a gender balance and an emphasis on developing capacity-building and enhancement programmes for rural youth to engage in sustainable food production and rural employment. "Youth are often one of the most vulnerable segments of IFAD's target group, both in terms of access to assets and services and

in terms of opportunities and capacities to engage in decision-making processes that determine their livelihood prospects," said Philippe Remy, senior adviser on farmers' organizations at IFAD.

To start responding to that request, a specific programme to map key actors, particular issues and success stories in the different regions of IFAD operations is under preparation. The programme will cooperate with the various on-going initiatives within IFAD to address youth issues and review strategies and programmes for promoting decent and productive employment of young people in rural areas. It will eventually lead to recommendations in terms of policies and projects to help support young people, women and men, enter and invest sustainably in farming activities. They will be discussed during the next global meeting of the Farmers' Forum in February 2012.

"When young people gain the skills and confidence they need to participate in community decision-making and take management roles in local organizations, they improve their own situations while they contribute their energy and creativity to their communities," said Nwanze. "The International Year of Youth is an added opportunity to raise awareness and galvanize action."

About the Author:

Dominique Magada is a freelance journalist and editor based in Malawi and writes for various international publications. Email: Dominique.magada@gmail.com

Reference

www.ifad.org

Youth and ICTs

Shaping the future of Agriculture and Rural Development

By Thérèse Burke & Ken Lohento

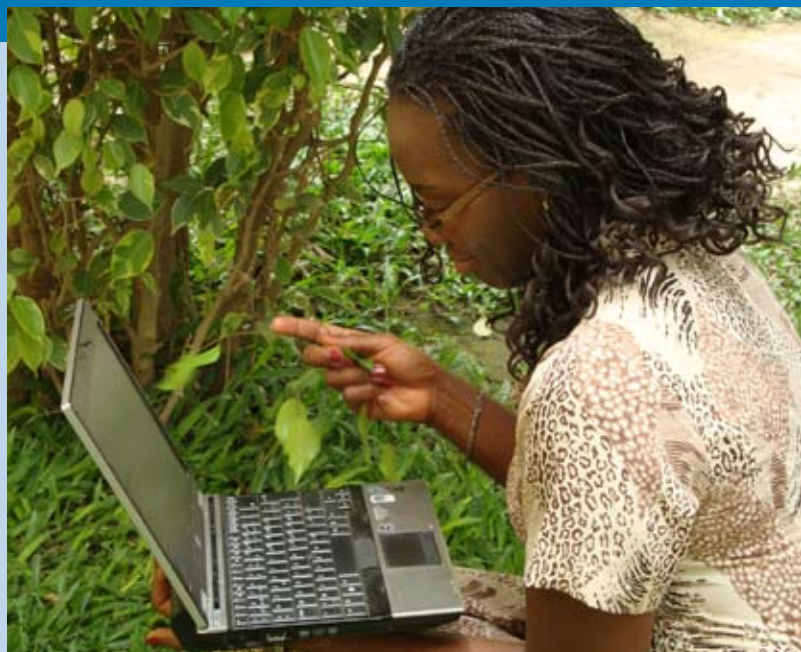
Agriculture in African, Caribbean and Pacific countries (ACP) faces many challenges. Most of these developing economies are heavily reliant on this sector for food security and economic growth. Agriculture accounts for over 50 percent GDP in some countries such as the Democratic Republic of Congo. This coupled with the high percentage of population (up to 60 percent in Africa) living off the land, means that the need to secure the continued interest of youth in agriculture is imperative.

However, global attention is now turning to agricultural and rural development as a result of the 2007-2008 food price crisis. Despite this, it is still not perceived as an attractive industry for the younger population.

The majority of farmers today are older. Studies by the Caribbean Farmers' Network (CaFAN) found that the average age of farmers in the Caribbean is 45 years with the majority being over 60 years of age. With a lack of youth to replace them the future of agriculture is uncertain. Youth unemployment is a critical problem. In several countries the number of young people out of work exceeds 50 percent.

It is therefore evident that a well supported agricultural industry could present the ideal solution. This is on the condition that the sector is transformed in the eyes of the younger generation. It has to become attractive, viable and offer real opportunities.

The key is to uncover new ways of empowering young people, showing them the opportunities that exist and the important role they can play in its development. One means of achieving this is through the use of ICTs. These technologies are filtering down through every socio-economic segment, even in remote rural areas. In 2010



Youth and ICTs.

CTA (Technical Centre for Agricultural and Rural Cooperation) held a competition inviting youth from around Africa, the Caribbean and the Pacific to share their ideas and experiences on the use of ICTs in the field. Their stories below clearly demonstrate the substantial entrepreneurial and innovative activities taking place in rural areas. Through the creative use of new technologies in agriculture, youth are reaping the rewards for their farms, their businesses and their communities.

Using ICTs to access and Share Agricultural Information

It has never been easier to access and share information thanks to the ubiquitous presence of mobile phones. Chris Mwangi, a 23 year old IT specialist from Kenya, highlights an example of this. He describes a young

man who has taken the revenue generated in his rural mobile phone kiosk to diversify into farming. He receives vital information on current agronomic practices through the 'Organic Farmer' e-bulletin which he accesses on his GPRS enabled phone.



Chris Mwangi.

Maureen Akena, a young development professional from Uganda, explains how a 25 year old small-scale fruit farmer in Maruzi County has used mobile phones to secure success for his business. He accesses weekly market price updates providing him with essential information on the best time to sell his produce. Social media has also provided him with an opportunity to enter new markets. In early 2010 he took part in a Web 2.0 training and subsequently joined Facebook and Twitter. He plans to use these tools to access a wider market for his fruit business.

Harnessing ICTs for Greater Business Success

Examples from Zimbabwe, Jamaica and Zambia demonstrate that the inventive use of ICTs can extend beyond simply accessing and sharing agricultural information. Several experiences from around the regions show the application of new technologies to provide access to markets and offer security systems.

"It is 7AM. A 28 year old Zimbabwean farmer starts to prepare for the day. This season she will produce 500 tonnes of high quality potatoes. Taking out her phone she sends an SMS with a notification of her produce levels. A short time later she receives confirmation of an order to supply one tonne of potatoes per week for twelve weeks. This was made possible thanks to a new service introduced by a local software company in partnership with mobile phone service providers [...]". This novel application of ICTs to link farmers with markets was outlined by Gerald Mangena, a 24 year old accountant from Zimbabwe.

The widespread use of ICTs is introducing a new level of interest and excitement when it comes to sharing information and doing business. It is this that can capture the imagination of the youth and help transform agriculture and rural development into attractive and lucrative sectors for them.

About CTA

The Technical Centre for Agricultural and Rural Cooperation (CTA) is an international nonprofit organisation established under a joint agreement between the Africa, Caribbean and Pacific (ACP) group of countries and the European Union. CTA's mission is to advance food security, increase prosperity and encourage sound natural resource management by facilitating access to information and knowledge, policy dialogue and capacity strengthening of agricultural and rural institutions and communities in ACP countries. CTA offers access to a wide range of products and services in numerous areas including youth in agriculture.

Raising youth awareness and building their skills in agriculture and rural development through ICTs, is the focus of the ARDYIS project established by CTA and its partners. The project contributes to the sensitisation of youth on the questions related to agriculture and rural development in ACP countries and to the promotion of opportunities for them. (<http://ardyis.cta.int/>). For more information on CTA visit www.cta.int.

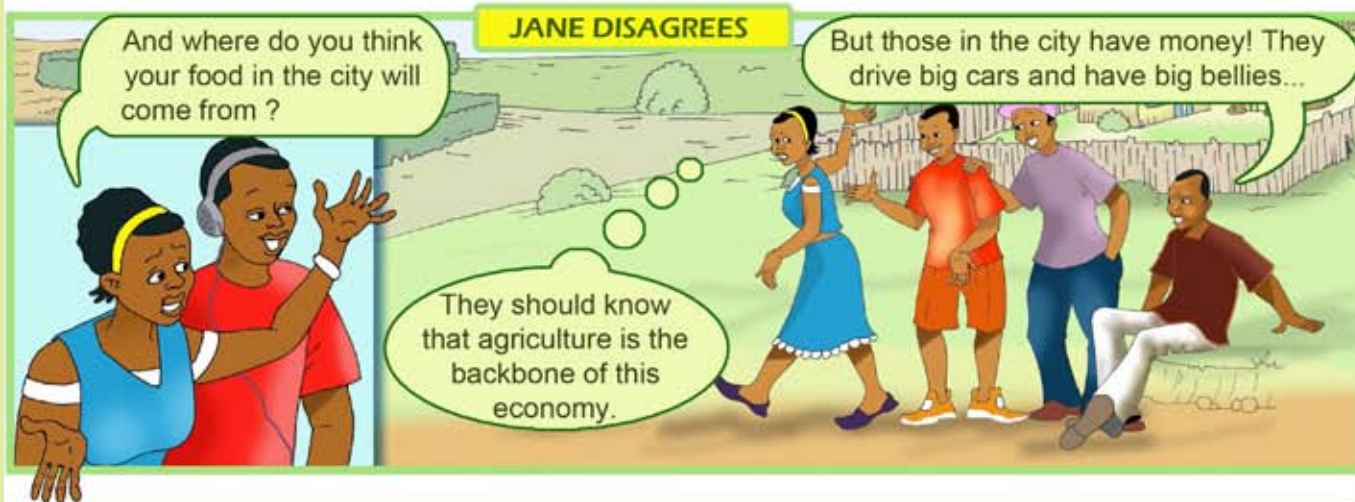
About the Writers

Thérèse Burke is Marketing Officer and Ken Lohento is Programme Coordinator of ICT for Dev at CTA. He also leads the ARDYIS project. E-mails: burke@cta.int and lohento@cta.int. For more information on CTA visit www.cta.int

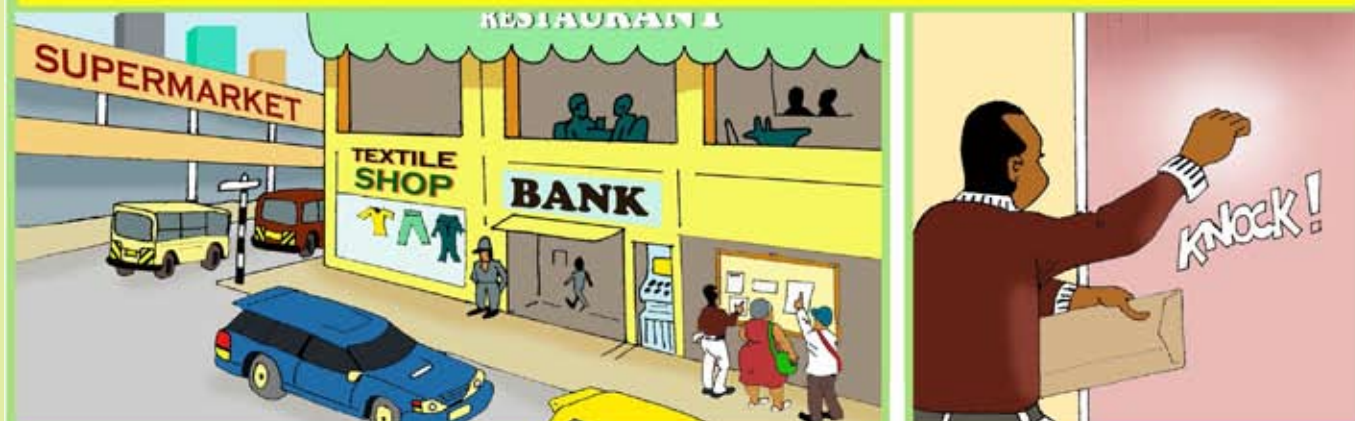
Winners of ARDYIS competition.



Photos: © Theresa Burke



IN THE CITY - JOHN MOVES FROM OFFICE TO OFFICE LOOKING FOR A JOB TO NO AVAIL





CITY MARKET-JOHN (LOOKING RUGGED) ROASTING AND SELLING MAIZE



ON THE SUBJECT OF

SCHOOL PROGRAMS DRAWING Pupils to Farming

In a bid to encourage healthy eating in schools, the Healthy Learning Programme has taken up the initiative of having school-based activities on small-scale farming in Kenya. The Healthy Learning Programme (HLP) is implemented jointly by Ministry of Education, the World Agroforestry Centre (ICRAF) and the Flemish Association for Development Cooperation and Technical Assistance (VVOB).

By Vivian Nereah



Photo: Susan Mwangi

The Healthy Learning Programme (HLP) focuses on equipping pupils, teachers, parents and surrounding communities with crucial skills to improve their livelihood while at the same time making classroom teaching practical and enjoyable.

Faced with the problem of regular absenteeism due to illnesses caused by poor nutrition and health practises, a number of schools have embraced the Programme.

So far, 30 schools located in eight arid and semi-arid districts are implementing various projects relating to agriculture and natural resource management relating to the HLP. The focus of such projects is to involve the pupils thereby ensuring they acquire skills that could be useful during and after the acquisition of formal education.

The HLP addresses the mutual links between the quality and relevance of learning and the health and nutrition status of children. Healthy children can concentrate on their studies better leading to good performance, and better educated children become healthier and more productive citizens.

Schools under the programme have established small income generation and learning projects based on broad themes of agriculture, environmental conservation and water harvesting. The schools are encouraged and supported to establish relevant projects depending on the climate of the area.

Naromoru Primary School in Kajiado North District is one of the schools currently implementing the programme. Located in a rocky and semi-arid environment mostly inhabited by pastoralist communities, the school community opted to engage in small-scale farming, environmental conservation and hygiene improvement activities.

"The school's rocky and dry environment did not deter us from engaging in agricultural activities. We decided to make the school a dumping site where contractors dump their topsoil from various sites. Once this was done, water scarcity became our next challenge" says the school head teacher Mrs. Joyce Sankok.

The school undertakes rainwater harvesting whenever the area receives seasonal rains. Rain fed agriculture is almost impossible in the area. The school has therefore invested in several water

tanks through the support of various stakeholders. The stored water is used for sanitation and hygiene improvement in the school with some being used for irrigation.

Several hand washing containers commonly referred to as "leaky tins" have been erected next to small vegetable gardens. Both pupils and teachers use the leaky tins. This way water used for hand washing is recycled to support the growth of vegetables in the small gardens. From this practise, pupils and parents have learnt about ways to conserve water.

Pupils together with their teachers have been growing beans, tomatoes, potatoes, kales and spinach in these gardens. Environmental conservation through tree planting is also on going at the school.

"We work in the garden during our free time. We plant, weed, water and harvest the vegetables grown in our garden," says Veronica Wamboi, a standard 6 pupil at the school.

Teachers at the school guide the pupils as they undertake tasks such as preparation of nursery beds, mulching, manure application and crop harvesting. The teachers further utilize the garden in teaching of various subjects. This has made learning interesting for the pupils and as a result, most of them enjoy working in the gardens.

"Pupils are able to determine how many rows need to be dug up in the gardens. They also calculate the quantity of seeds needed to fill up rows dug. This is mathematics learnt in a practical way. Pupils will not forget such concepts," says Mrs. Sankok.

In the school, pupils also learn business skills as they are allowed to sell the excess of what is harvested.

Vincent Kinungi a standard 7 pupil at the school says: "We receive nutritious school meals whenever we harvest vegetables and therefore don't have to bring our own food to school. We sell the excess and help the orphans in our midst". Kevin is also the treasurer of the Healthy Learning Club in the school. The Club organises pupils to work in the garden ensuring all pupils in the school are involved in the project.

According to the head teacher, the idea of gaining a school meal from their hard work in the gardens further motivates them to work harder and to try



Matolo Musyimi displays his kitchen garden at home – skills were learnt in school through the Healthy Learning Programme: at the Kathiani Primary School, Kathiani District

out farming at home leading to skills transfer to the community.

“Using the skills learnt in school, I established my own garden at home where I grow various vegetables. From the sale of the produce, I have been able to support my family purchase basic commodities like flour and sugar”, says Veronica Mugure another standard 7 pupil at the school.

Mrs. Hannah Wanjiru, a parent at the school and treasurer of the school management committee confirms that indeed skills are being transferred to the pastoralist community. “Our children teach us what they learn in school. Personally, I have learnt

to grow vegetables in my garden using wastewater from my kitchen. I no longer buy kales and tomatoes as we grow our own”

Technical Advice

Before and during project implementation, schools are encouraged to link up with relevant personnel working at the district level for technical advice. Schools implementing agricultural projects such as vegetable growing, livestock and poultry keeping usually invite officers from the Ministry of Agriculture and Livestock to assess progress of projects. This is important as it ensures pupils, teachers and parents acquire the right skills with regard to vegetable growing, livestock rearing or whatever project is being implemented. Most schools in arid and semi-arid areas are encouraged to grow drought resistant crops.

“We are encouraging schools to learn from neighbouring schools already implementing the programme as it presents a practical ground for learning. The pupils see, do and from that, they learn,” says Mr. Clement Osano, District Quality Assurance and Standards Officer in Kajiado North Education Office.

About the Writer

Vivian is the Communication and Information Support Officer, Healthy Learning Programme E-mail: sfpmoest@education.go.ke or vvobkenya@vvob.or.ke

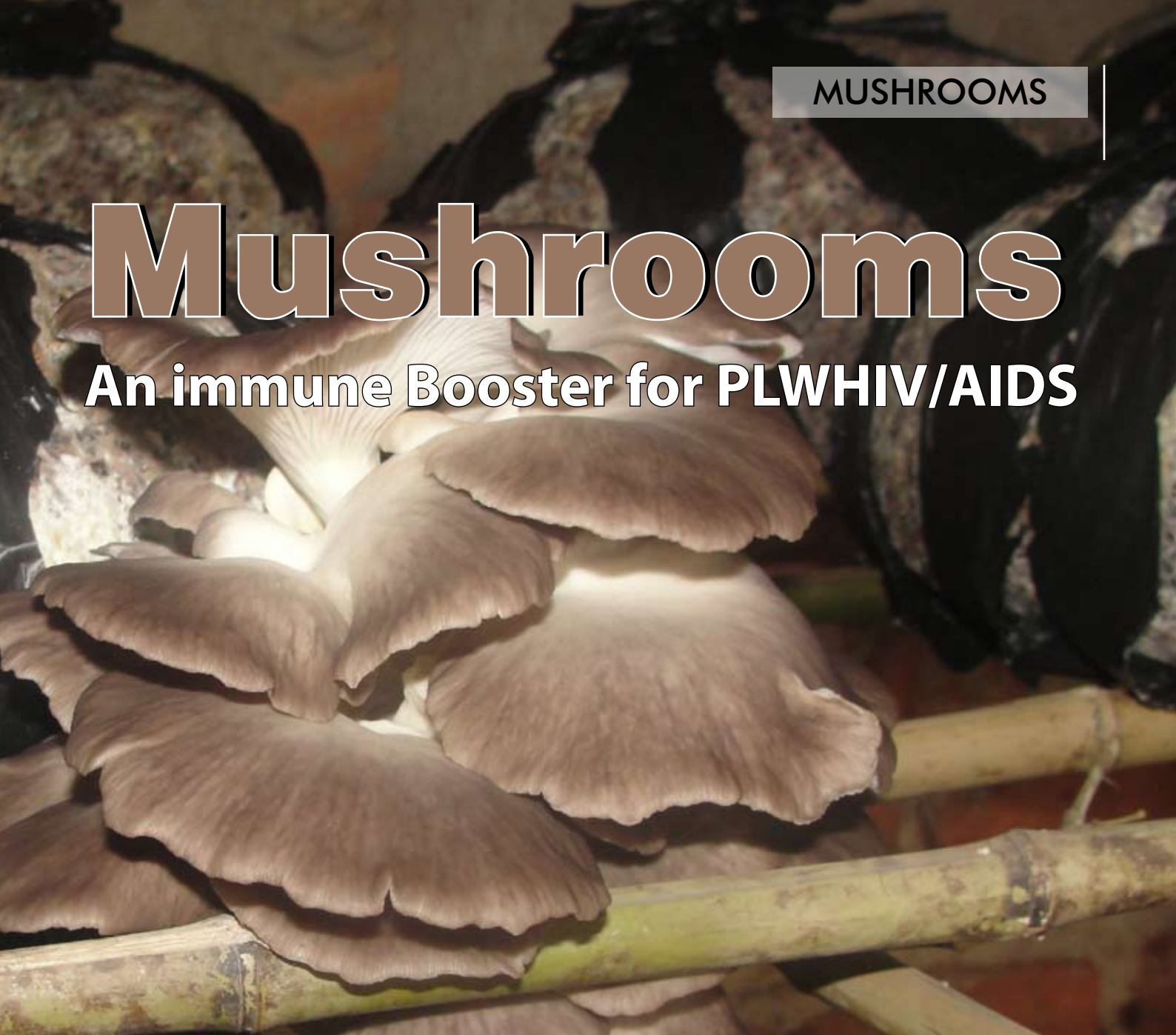
For more information: http://www.vvob.be/kenya/files/media/AGRICULTURE_FOR_LIFE_TX_16TH_OCT_2010_LR.mp3



Naromoru Primary School, notice the hand washing facilities next to the gardens. 2011 – Healthy Learning Programme. Photos: VVOB, Healthy Learning Programme

Mushrooms

An immune Booster for PLWHIV/AIDS



Uganda has often been celebrated as a model for Africa in the fight against HIV and AIDS. Strong government leadership, broad-based partnerships and effective public education campaigns all contributed to a decline in the number of people living with HIV and AIDS in the 1990s. In spite of efforts towards the fight of the epidemic, AIDS has continued to cause significant deaths in the country going by the figures reported by the Ministry of Health. A group of women in Mukono Municipality, central Uganda have developed an approach based on their experiences to improve livelihoods and the immunity of members living with HIV & AIDS by using locally grown mushrooms.

By Noah Bamulabire

Gabula Attudde Women's Group a Community Based Organization (CBO) started in 1994 targets informally employed women in peri-urban/rural areas of Mukono Municipality, central Uganda.

In 1998, the group that has 72 members came up with an initiative of mobilizing the community towards income generating projects and involving people living with HIV/AIDS in a project that not only improved their economic status but their health status as well.

Mushroom Gardens

The group learnt how to set up mushrooms gardens to grow Oyster Mushrooms (*a plastic bag with cotton seedlings, maize husks and mushroom spawn that is placed in a dark room before germination and then shifted a normal lighted room*) as a lucrative enterprise. The project was supported by the National Agricultural Advisory Services (NAADs), a government body.

At the initial stages, the group members used locally available materials for the construction of the unit to house mushroom gardens. They used mud (obudongo); papyrus (ekiwempe) and dry banana leaves (essanja). The unit is 10 by 10 feet. To construct a unit one needs the following:

	Item	Amount	Source of material	Estimated cost in US\$
1	Poles	20 large poles & 40 small	Available locally	13
2	Emmuli	5 bundles	The mature elephant grass stems	4.34
3	Essubi	100 bundles	Dried spear grass	4.34
4	Essanja	-	Dried banana leaves	
5	Obudongo	-	Mud mixed with water	8.695

Significance of Mushroom Consumption for PLWHIV/AIDS

In addition to creating employment opportunities and increasing household incomes, mushrooms have been identified and recommended by doctors as a source of a nutrient supplement to children with measles and people living with HIV and AIDS, especially those with sores and skin rushes. Mushrooms are immune stimulants and fight infections by initiating an immune response that results in higher levels of white blood cells, cytokines, antibodies and complement proteins.



A mushroom farmer at his mushroom garden.

Alice Kalulu Nakibuuka, has nursed 13 years old Paul Kibirige, her grandchild, since 1995 when his parents died from HIV and AIDS complications. She is a member of the Gabula Atudde Women's Group and strongly believes that mushrooms have boosted her grand child's immune system.

"Paul's parents died in 1995 as a result of AIDs. The mother died when he was one and a half years old but after following good nutritional and care advice from doctors from Mulago Hospital, he has survived all this years," notes Nakibuuka. She recollects that her grandson was in a bad condition after his mother's death. She started using mushrooms and took Kibirige to the Acute Clinic of the AIDs Support Organization (TASO) in Mulago who also recommended and provided Antiretroviral (ARV) drugs for him.

"My doctor at the Acute Clinic, Mulago Hospital advised me to eat mushrooms. My grandmother and I were advised that mushrooms help clean up intestinal anomalies and increase my CD4 count. I started using mushrooms in 2006," says a healthy looking Paul Kibirige. He is a primary school leaver from Royal Heights Primary School in Mukono and is looking forward to joining secondary school this year.

Other Benefits from Mushrooms

Mushrooms are well known to be cultural delicacies for many tribes in Uganda and the world over. In some of the tribes like the Basoga and Baganda, mushrooms are treasured as an important ingredient during traditional ceremonies such as the initiation of twins two weeks after birth.

On the other hand, mushroom gardens can be used as organic manure for other crops. The gardens have valuable organic components including salts, iron and potassium which when absorbed for other crops such as maize and vegetables increases their production.

Challenges

Mukono municipality lies in an urban periphery. Whereas the location factor offers a market potential for the products, lots of huddles are experienced. Urban animals stray to the gardens destroying the mushrooms. Also considering the fact that women play a critical role of ensuring that they provide water and food to the home alongside the different

sex roles, some of the members in the group have dropped off.

Conclusion

Through mushroom growing, people affected or infected with HIV and AIDS have been able to boost their immunity hence live longer. Personal hygiene is paramount in the families of those engaged in mushroom growing since there are high hygienic requirements needed in the processing of mushrooms. With assistance from the local government and support from the Community Driven Demand (CDD) project, the group intends to develop into a community information centre. CDD is government fund sent to every sub county across the country intended to “kick start” innovation by farmers.

About the Writer

Noah Bamulabire is a Field Officer at the ALIN Lukwanga Maarifa Centre in Uganda. E-mail lukwangamaarifa@alin.net.

Resource

http://www.mushroomharvest.com/extra_pages/med_mushrooms.htm

Mrs. Kiwazi Esta, Chairperson of Gabula Attudde Women Group.



Photos: Noah Bamulabire

REARING RABBITS AS AN ENTERPRISE

Rabbits are one of the easiest animals to raise. They require very little cage space and very little of the farmer's time. Raising of rabbits can be started with a very low investment. The demand for white meat is on the rise and one can make extra money from rabbits.

By Susan Mwangi

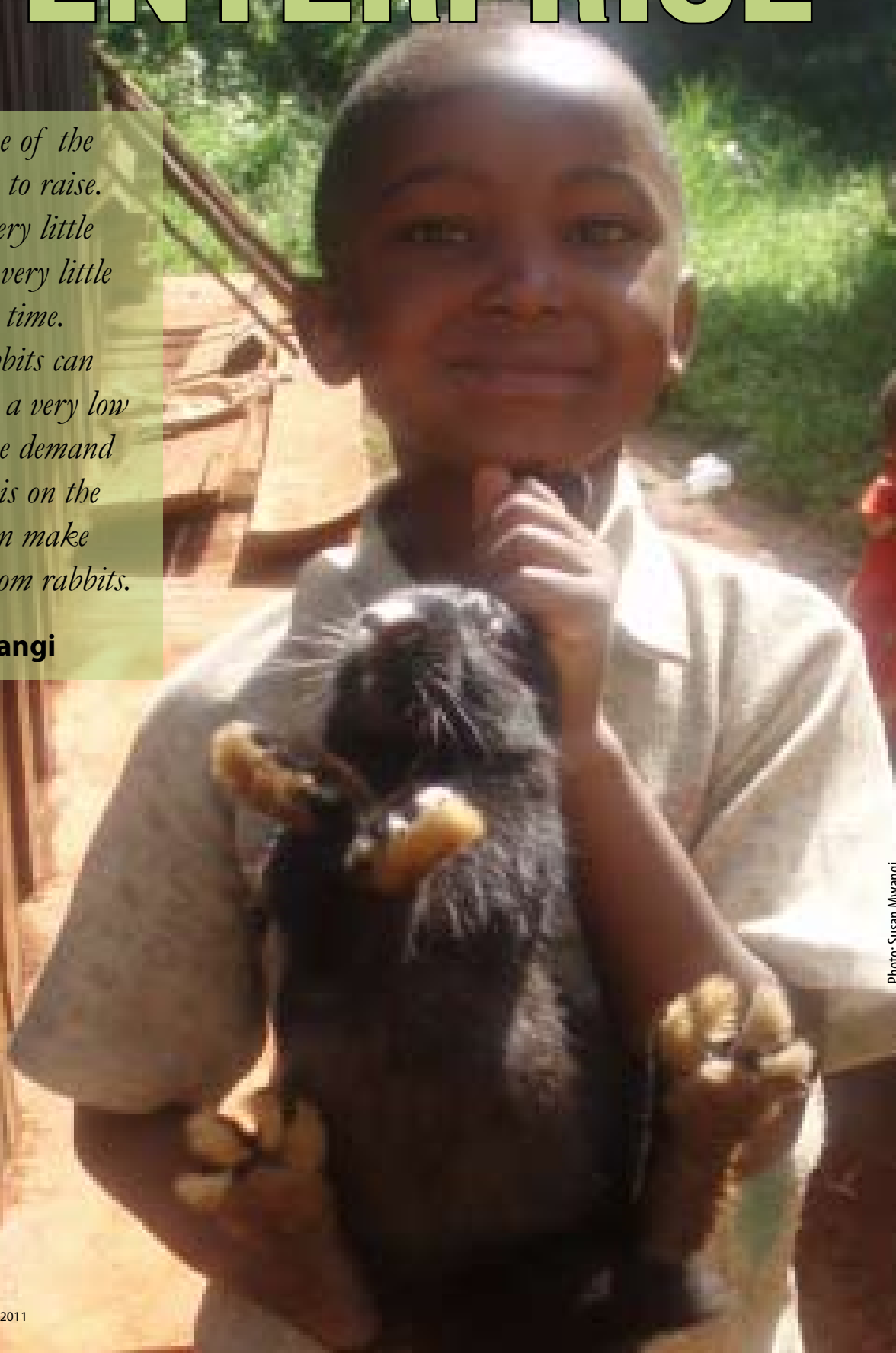


Photo: Susan Mwangi

Rabbits provide meat and other products, and can be quickly sold for cash or turned into a nutritious meal when needed. With careful attention, they are not difficult to raise.

With a society that is now more health conscious, many more people are now consuming white meat. Rabbit meat is tasty and has low fat content. This has resulted in a high demand for rabbit meat from individuals and the hotel industry, an opportunity the youth can take advantage of to make income. In Nairobi, Kenya one kilogram sells for about Kshs. 500 (US\$ 6.25). Rabbit skin sells for about Kshs. 300 (US\$ 3.75).

The best breeds available in East Africa are California White, Chinchilla, New Zealand White, Flemish Giant, Angola, Earlop, Paramino, Dutch, Agut, Rex, Chequered and Franskvender.

How to start rabbit keeping

The first thing needed is a decision on the sort of pen (hutch) to be built. A good one should be three feet long by two feet wide. This is enough room for a single rabbit. One only requires a little space on which to put elevated sheds.

The initial capital for constructing a hutch is minimal. One can also use scrap wood and buy a roll of wire to enclose it. One can also have the cage under a house roof that saves costs and well utilizes space. To start, one needs a doe (female) and a buck (male). Once the kindling begins, the colony increases rapidly. One doe is capable of yielding about 30 to 40 rabbits a year. If one starts the business having borrowed the initial rabbits, within half a year one can return live rabbits of the same age. Rabbits produce litters of six to ten offspring after a gestation period of only 30 days.

Feeding rabbits

A rabbit requires very little feed and water. It is easy to feed them as they can eat a variety of foods. They feed on forage such as grass and leaves, or leftover food.

Forage should be kept off the cage floor by tying it together in a bunch and hanging it from the ceiling or wall of the cage. This prevents the food from contamination by

urine and droppings. Wet forage could lead to diarrhoea and even death. If forage is wet when harvested, it should be allowed to dry for a few hours first before it is fed to the rabbits. Containers for water and food should be clean. Rabbits need clean water at least twice a day.

Health of rabbits

To know if your rabbits are healthy check out for signs such as a smooth coat, standing ears, clear eyes, quiet breathing, no mange (scabies) forming crusts around the nose, eyes, at the edges of the ears or inside the ears as a dirty mass. Put the animals on the ground or a table with a rough surface and lift the front part of the animal to watch for irregular legs, inspect the anus to see whether it is dirty from diarrhoea, which is often the case in young rabbits. Check the stomach (abdomen) of the animal. It should feel soft but smooth; a spongy feeling may indicate some intestinal troubles. Watch for sneezing. Dirty front legs and/or a dirty nose may indicate a coughing disease (pasteurellosis), because the animal 'rubs' its nose with its front legs.

Pneumonia and diarrhoea are the two common ailments that may attack rabbits but they are easily countered by sheltering rabbits in a warm and clean environment. Cures are also readily available at agrovets where a dose in Kenya costs Kshs.70 (about one US dollar).

Important Networks

For one to be a successful farmer, it is good for one to join networks or associations that enhance farming capacities and on value addition. In Kenya there is the Rabbit Breeders Association of Kenya. They have plans to create viable rabbit enterprises for members in the country. Another is the Rabbit Network Kenya that targets disadvantaged children helping them develop activities that can generate income and to provide hands-on skills training.

About the Writer

Susan Mwangi works at ALIN as the Communications Manager. E-mail: smwangi@alin.net

Reference

Schiere J.B., Corstiaensen C.J. (2008), *Rabbit keeping in the tropics*, 5th revised edition, Agromisa Foundation and CTA, Wageningen, Netherlands.

YOUTH GROUPS SPUR FARMING



Members of Newsite Initiative Youth Group



Crosses of the Kenbro chicken on the farm of one group member

Youth in Kenya make a large percentage of the population and are actively involved in many spheres of the economy. Since agriculture is the mainstay of the Kenyan economy, youth should be facilitated and encouraged to partake of it.

**By Dr. Josiah Gitari,
Leonard Nyaga Kirore and
Dr. Immaculate Njuthe
Maina**

Kenya's economy is predominantly dependent on agriculture. The sector directly contributes 26 percent of the GDP and another 25 percent indirectly. It employs over 40 percent of the total population and over 70 percent of the rural people. Food security and poverty remain major challenges for the Government: over 43 percent of Kenya's population is food insecure and about 46 percent—many of whom are in the rural areas—live below absolute poverty. Hence the youth population in any farming community in Kenya becomes a strategic resource to the success of efforts to boost food production and improve rural livelihoods.

Young people have great propensity to adopt new ideas, concepts and technology. As such they are sure catalysts for changing the way agriculture is practiced and perceived. Enhancing the productive capacity of rural youth in agriculture, environment and natural resource management will elicit positive outcomes for youth unemployment in the wake of widespread youth unemployment and stem the significant rural-urban youth migration. Harnessing the energy that youths, in their large numbers have provides remarkable opportunities for increasing agricultural productivity.

One youth group found in Kiritiri Division of Mbeere South District, Kenya has taken up their rightful place in agricultural development. Newsite Initiative Youth Group was registered with the Department of Social Services in Mbeere District of Embu County on 31st October 2006. The main objectives of the group were:

- To access training in farming
- To engage in income generating activities
- To establish joint saving schemes
- To carry out welfare activities within the group

Group membership is open to male or female members who are 18 years of age and not more than 40 years old. For married couples, only one of the family members, either the husband or the wife, joins the group but not both. The group has 24 members, 15 male and 9 female.

Group's involvement in research-extension-farmer linkages

In 2010, the group received the support of Kenya Agricultural Research Institute (KARI) under KARI's "Agri-food systems project". The Project adopts a bottom-up approach. It acknowledges that rural dwellers are active participants in the development process and willing to confront problems that they face. It is this maxim that led to the selection of the Newsite group to participate in this three-year project, funded by the International Development Research Centre (IDRC). In the short rain season of 2010, the group planted pigeon peas. It is expected that members of the group will learn about improved agricultural technologies from KARI scientists that they can apply on their farms. They will also have the opportunity to teach others farmers in their community about the technologies.

In addition to activities undertaken in collaboration with KARI, the group has embarked on a program of inviting experts from various organizations to teach them. The aim is to acquire new skills and capacities for improved agricultural production and productivity. Lessons learnt so far include:

- Upgrading of goats with superior breeds
- Tree grafting
- Safe use of pesticides
- Terracing and terrace establishment
- Choice of drought tolerant crops

- Row cropping patterns
- Sprayer calibration
- Fertilizer application methods

Success cases

Among the groups' income generating activities include a Kenbro chicken-breeding project. The group got some Kenbro chicken through the Ministry of Livestock and have upgraded their chicken through crossbreeding with the indigenous ones. As a result, the crossbreeds that have broiler and layer characteristics lay more eggs. An egg costs Kshs. 20 (US\$ 0.25) compared to Kshs. 8 (US\$ 0.1) from local chicken while a mature Kenbro chicken sells at Kshs. 400 (US\$ 5) compared to Kshs. 200 (US\$ 2.5) for the indigenous ones.

Other projects being done by the group include a tree nursery since 2007. Tree planting has been done in communal areas including Kiambere Hill and the local chief's camp. The group is also doing environmental management specifically on soil and water management.

Challenges

The main challenges faced by the group include scarcity of water for the seedlings in the communal nursery, frequent attack of trees by termites and withdrawal of members from the group.

About the writers

Dr. Maina is the Project Leader, KARI-IDRC Agri-food Systems Project, KARI Headquarters. Dr. Gitari is a Project Agronomist, KARI Embu and Leonard Kirore is a Frontline Extension Worker, Kiritiri Division, Kiambere Location. E-mails: immaculate.n.maina@gmail.com and gitarijosiah@yahoo.com

Members of the group in their pigeon pea farm. This activity is facilitated by the KARI-IDRC supported orphan crop project



Photos: KARI

PROMOTING VALUE ADDITION TO KEEP THE RURAL YOUTH AT HOME

Amiri Hamisi, 22, and his brother Juberi Hamisi, 20, from Tongwe village in Bagamoyo, Tanzania did not complete secondary school due to lack of school fees. This limited their chances of securing good jobs casting a gloomy picture over their future. They turned to agriculture, farming on their small family farm and providing cheap labour to surrounding farmers.

By Catherine Njuguna

However, in the last three years things took a positive turn when processing of cassava was initiated in the village as a way to fight poverty and hunger. Previously, villagers sold their surplus cassava in the market as fresh roots. The price was poor as cassava rots after three days. Rather than watch it go to waste they would be forced to sell at very low prices to middlemen who bought to sell in big towns like Dar es Salaam and Morogoro.

The cassava farmers in the village, forming an association known as Wambato farmers group (*Wakulima wa Mhogo Bagamoyo Tongwe*), saw an increase in their cassava production after adopting new high yielding improved varieties that were also resistant to cassava brown streak disease. They were introduced by the Roots and Tuber programme of the Tanzanian Ministry of Agriculture, Livestock and Cooperatives in response to the disease which causes a dry rot in the tubers rendering them useless – they are not edible nor can they be milled into flour and which, had dramatically affected the crop's production in the coastal areas in Tanzania. They were also trained on good agronomical practices to get maximum yield and contour farming since the village is very hilly. Soon the village had another

problem. There was now too much cassava leading to a drop in the market prices. The farmers were demotivated.

In 2008, the Sokoine Agricultural University of Agriculture introduced simple affordable processing technologies to process the surplus cassava. It constructed a processing centre with simple machines and trained the group members on production of cassava flour.

Value Addition

The International Institute of Tropical Agriculture (IITA) under the Unleashing the Power of the Cassava in Africa (UPOCA) did follow up training for the group in 2009 and 2010 to improve its processing to produce high quality cassava flour and cassava starch, quality control and safety issues and on packaging and marketing.

Today the group members and their families are enjoying a greatly improved standard of living from the income made from the sale of high quality cassava flour to supermarkets and shops in Morogoro and Dar es Salaam as well as around the village.

The group processes cassava twice a week and employs young people such as Amiri and Zuberi to provide labour. It also buys cassava from





At the top Juberi Hamisi peels cassava. Middle: Amiri grinding the cassava and below, Hamisi dries the cassava.

the surrounding farmers at a better price than the middlemen. Amiri and Zuberi, motivated by the ready market for cassava and using the income made from providing labour, they each have leased land to grow the crop, which they sell to the group. They have no intention of migrating to an urban centre to look for employment.

Rural poverty is one of the drivers of rural to urban migration as young people move to towns in search of jobs. Value addition of farming products, ranging from simple washing, peeling, drying to processing into high value marketable products, creates jobs and increases income. It is one way out of poverty and hunger. First it eliminates wastage especially of a highly perishable crop - experts estimate that 10 - 40 percent of food is lost to post harvest losses globally, *Food Agricultural Organisation (FAO)*. It creates more income and farmers then have more money to invest in agriculture, purchase better seeds and fertilizers. They are better able to meet their family needs and educate their children. Labour is needed to process and to transport the products to the market, and more often, you will need small-scale fabricators to develop simple processing machines, creating more jobs and income.

According to Dr Adebayo Abass, International Institute of Tropical Agriculture (IITA) cassava value -addition specialist based in Dar es Salaam, a lot of research has gone into increasing production to increase food security, such as the development of high yielding and disease resistant varieties. However, it is now time to move to encompass the entire value chain to ensure farmers are able to gain from the increased production.

This must also go hand in hand with identification of markets for the processed products. "Farmers or processors must be linked to industrial processors or importers of semi-processed industrial raw materials. For instance, when introducing technologies for starch production, be it from cassava or potatoes, it is necessary to identify potential industrial users of starch."

Dr. Abass says that the introduction of appropriate processing technologies combined with identification and development of new markets for processed products will lead to a reduction in rural poverty and hunger because the increase in production will not cause a price reduction. And the youth will not go into the cities in search of a better life. They will have it, right in the village.

About the Writer

Catherine works for IITA. E-mail: c.njuguna@cgiar.org

How to water **Baobab Magazine**

Introduction

The *Baobab* is a quarterly magazine that is published in March, June, September and December. Every issue has a theme that guides the topic one can write on. Topics for 2011:

- March: Youth & Farming
- June: Trees & Farming
- September: Regional Food Systems
- December: Land Issues

How to Write

Know what you are writing about in advance and think clearly, carefully reflecting on:

- WHAT was the initial context and what were the difficulties faced?
- WHAT were the reasons for the approach taken to improve the situation?
- HOW did they go about it and who took the initiative?
- WHEN did all this happen, and to what extent was the timing important?
- WHAT happened as a result?
- WHY did it work out as it did? (We appreciate opinions/analysis/conclusions relevant to field level, as well as recommendations for policy makers).
- WHERE did the action take place?

Please Ensure that You

- 1) Thoroughly read the call for articles and check that the article fits well with the theme being covered.
- 2) Explain any terms or ideas that may not be understood in every part of the world.
- 3) Acknowledge all sources and references used.
- 4) Explain any abbreviations used.

Full editorial support is provided. As the articles go through a rigorous editorial process, authors are usually requested to provide additional information or clarifications. We would therefore rather have too much information than too little in the first draft!

Format

1. Articles should be about 700 to 1000 words (one, two or three-page articles) and should be emailed to Baobab@alin.net or smwangi@alin.net as a word document attachment.
2. Include no more than five references. Each reference should include title, year of publication, name of author, and publisher.

3. Please provide a current contact address at the bottom of the article. This will also be published in the magazine. We would also appreciate a contact phone number for our own use.

The editor reserves the right to decide whether or not to publish an article or contribution after receipt of the first full draft. Articles that are accepted will be edited to the *Baobab* house style and shortened if necessary. Contributions edited in this way will be returned to the authors for approval before publication. Articles accepted for publication in the *Baobab* may be chosen for translation in any of the six regional editions. We will endeavour to inform authors if their article appears in other editions.

Photos

Pictures speak volumes. Two to four pictures relevant to what you have written must accompany your article.

Illustrations, drawings, or maps are also welcomed. Please provide the name of the photographer or artist. Please ensure the photos or illustrations are of suitable quality.

Send the pictures as attachments in jpeg format of at least 300kb and above. Also remember to include a caption outlining the people or activity in the picture.

Creative Commons License

Please note that we use the "Creative Commons License Attribution non-commercial share alike 3.0 unported" policy regarding copyright. We encourage free and open exchange of information. As such readers and authors are encouraged to copy and circulate articles from the *Baobab* quoting the source. In addition, this means that we may use submitted photos or text in our other publications. We will try to contact you and credit your work in accordance with the license.



CALL FOR ARTICLES

Trees and Farming

Trees are important in farming and can play a transformative role in rural agriculture. Growing of trees and practicing agriculture on the same piece of land (Agroforestry) must be encouraged for a better livelihood as it can be more biologically productive, more profitable and be more sustainable than forestry or agricultural monocultures.

In the next issue of *Baobab*, we shall feature articles on the benefits of farmers planting trees in their farms, management of natural forests, reserves and protected areas. We would also like to look at legislations and agricultural policies supporting this, human practices that need to be stopped or enhanced. Also let us know what your organization is doing to ensure communities and local institutions get involved in managing land, trees and forests.

Many people in East Africa depend on the trees and forest resources for subsistence and income generation. As a result, local communities are losing land and also leading to land degradation. Different measures have been taken to counter this effect such as Payment for Ecosystems Services (PES) that rewards farmers for providing environmental services. Let us know how this has worked in your locality. Another action involves the introduction of Reduced Emissions from Deforestation and Forest Degradation (REDD) projects to stop deforestation. Let us know how this has worked or not worked for you and what actions should be taken.

We welcome an article on this topic including pictures and suggestions of other people, experts or organizations that can contribute for this *Baobab* issue.

Please write to the editor smwangi@alin.net by April 30, 2011.

Let us Know by SMS!

Dear Reader,

The short messaging service (SMS) option of getting in touch with the *Baobab* editorial team is back! Send us an SMS letting us know what you think about a certain article, suggestion for future articles or any other general comment.

To send an SMS, start with your **name, gender, age, location, country, email, postal address** followed by the letters BB, page number of article then your comment.

For example:

Mwalimu Juma, M, 43, Dar es Salaam, Tanzania, mjuma@yahoo.com, P.O. Box 123 Kwetu. BB. Page 17. I increased my goats' milk production by following your advice!

Or

BB. **Future article.** How to do drip irrigation in an arid place

BB. **Comment.** I received my copy of the *Baobab*!

BB. **Question.** How can I subscribe to the *Baobab*?

Send your SMS to the number + **254 717 032 322**.

THE LEADER CALLS

1ST BRAZILIAN SUMMIT OF NON GMO
PRODUCTS AND SEED MARKETS

VISIT THE WEBSITE AND
DISCOVER WHY THIS
MEETING COULD CHANGE
YOUR FUTURE:

www.semear2011.com

10 AND 11TH MAY 2011

SÃO PAULO - BRAZIL

HOSTED BY:



ENDORSED BY:



SUPPORTED BY:



SEM
EAR
2011

BOOK REVIEWS

LEARNING FROM EXPERIENCE

A manual for organizing, analyzing and documenting field based information

The Centre for Information on Low External Input and Sustainable Agriculture (ILEIA) has over the past 24 years contributed to the exchange of field-based information about the experiences of small-scale farmers trying to improve their production in an environmentally sound manner. One of the major difficulties related to this aim has been and remains, the lack of documentation of practical field activities taking place at community level.

ILEIA feel it's important that these activities are documented so that the lessons learnt can be used to further develop the existing knowledge on sustainable agriculture and improve the initiatives taking place in the field.

This manual is an attempt to develop a method which will help people to document their experiences. It presents a practical step-by step method to help describe and analyse a project and thus document it fully.

Copies of this manual can be found at ALIN *Maarifa* centers based in Kenya, Uganda and Tanzania.

For more information contact:

ILEIA

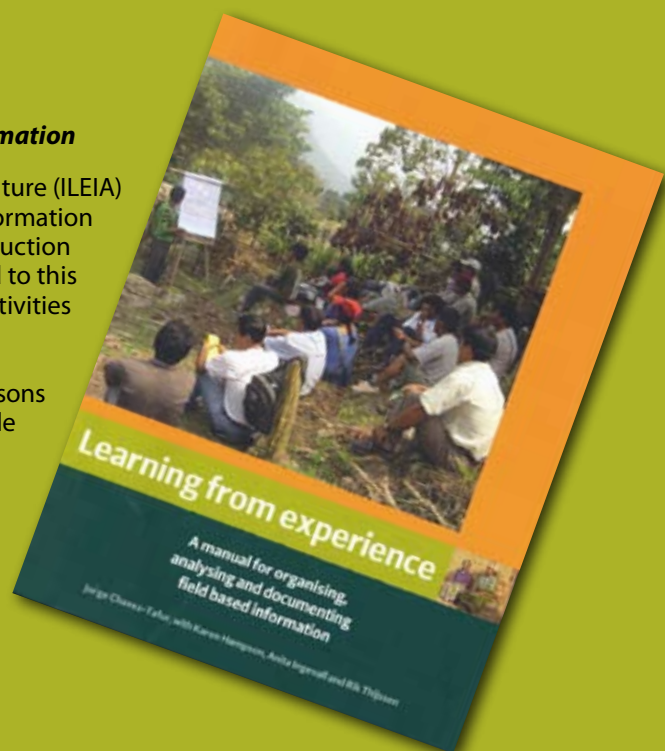
P.O Box 2067, 3800 CB Amersfoort, The Netherlands

ileia@ileia.nl

www.leisa.info

www.agromisa.org

www.cta.int



GUIDE TO GROWING MUSHROOMS

In East Africa, cultivation of mushroom has picked up over the last ten years. The crop has gradually gained popularity among small scale and subsistence farmers because of its potential as high value crop for both export and local markets. Mushroom popularity has also been enhanced by its medicinal properties and high nutrient levels.

Many small scale farmers are currently venturing into mushroom production but their success is being hampered by lack of simplified information on its value chain. Agricultural Information Resource Centre has realized this knowledge gaps in the mushroom industry and is spearheading documentation of various best practices to assist farmers and stakeholders venture into mushroom growing.

This manual includes steps in production of different types of mushroom, value addition and economic importance of growing mushroom. It is aimed at assisting the farming communities and mushroom consumers in upscaling the industry.

A copy is US\$ 5.

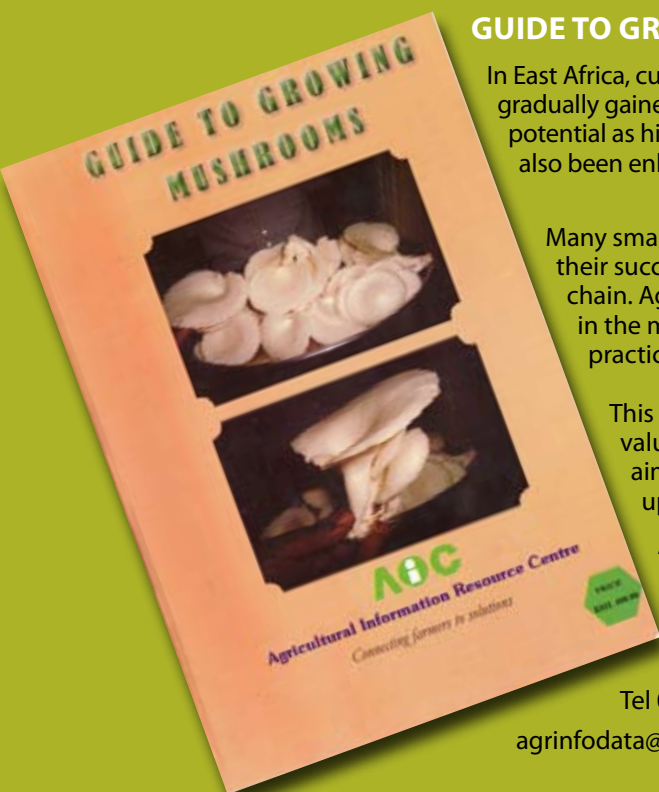
For more information contact:

Agricultural Information Resource Centre

P.O Box 66730-00800, Nairobi, Kenya

Tel 0204446464

agrinfodata@yahoo.com or agriinfocentre@yahoo.com





Dear Editor,

Greetings from Matumaini Rehabilitation Centre. Thank you for sending us the *Baobab* magazine. We are very glad to receive such a useful magazine.

I am especially interested on sustainable small-scale agriculture. We have a centre here for youth/children with disabilities and wish to start an agricultural section for the youth. I believe your magazine will be very informative to assist us in going ahead.

Miss. G. Scott Kellie, Molo, Kenya

Dear Kellie,

The *Baobab* is a magazine that focuses on small-scale sustainable agriculture. Be assured that you and other readers at the rehabilitation centre will continue to benefit from the magazine. For particular topics please do let us know and we shall send you relevant materials.

Editor

Dear Editor,

I am a model farmer based in Busiu Sub County, Bunabutye Parish, Lambo Upper. I do poultry farming, plant bananas and perennial crops.

Your magazine is educative and I hope to receive copies. They will improve my knowledge about growing and management of various agricultural projects. I have plans of commercializing my projects and need knowledge and guidance.

Thank you.

Fred Masaba, Busiu Village, Mbale, Uganda

Dear Masaba,

Thank you for the interest in the *Baobab*. We shall include you in our database so that you receive the magazine when published. Feel free to write to us on specific guidelines you need in your farm and we shall direct you to an expert.

Editor

Dear Editor,

It is great to read the *Baobab*. I am particularly interested in indigenous foods mainly among the Luo and Luhya communities. My interest is in the promotion of edible insects in Western Kenya such as termites/white ants and grasshoppers. I am a Food Scientist and all my research has been geared to exploiting the delicacy for commercial exploitation. I published an article on insects in a previous *Baobab* in 2008. The challenge right now is to introduce a value chain for the insects for the benefit of the harvesters as well as the end consumer. I would therefore wish to link with organisations that can work with the team of scientists at Jomo Kenyatta University of Agriculture and Technology, (JKUAT) and Bondo University college to bring this to a reality. Do you think you can help?

John N. Kinyuru, Department of Food Science and Technology, JKUAT. Nairobi, Kenya.

Dear Kinyuru,

The *Baobab* is a forum for our readers to share and read about what others are doing. They include learning institutions, organizations and individuals. I hope one of our readers can be of help to you on value addition for edible insects.

Editor.

“There are so many youths who, as a result of fast population growth and formal employment sectors’ lack of absorptive capacity, are virtually lost. This is wasted or idle energy which needs to be tapped and harnessed for useful engagement.”

-Prof Ruth Oniang'o, Kenyan Former Minister for Education

“Earth is here so kind, that just tickle her with a hoe and she laughs with a harvest.”

-Douglas Jerrold in his book A Land of Plenty

“We all know that young are among the most affected by the key development challenges of our time, but they are also at the of developing innovative to these problems.”

-Joint statement by the heads of the different UN entities for the launch of the International Year of Youth, 12th August 2010.

“I admire farming but not the kind our forefathers practised. The reason why I don't farm is that my parents and neighbours would not listen to my opinion of practicing modern farming techniques and farming as a business.”

-John Njue, ALIN Kyuso Field Officer

“To forget how to dig the earth and tend the soil is to forget ourselves.”

-Mahatma Gandhi



ALIN

Connecting Communities with Knowledge

